

CONTROL VALVES

FVL-400 Series

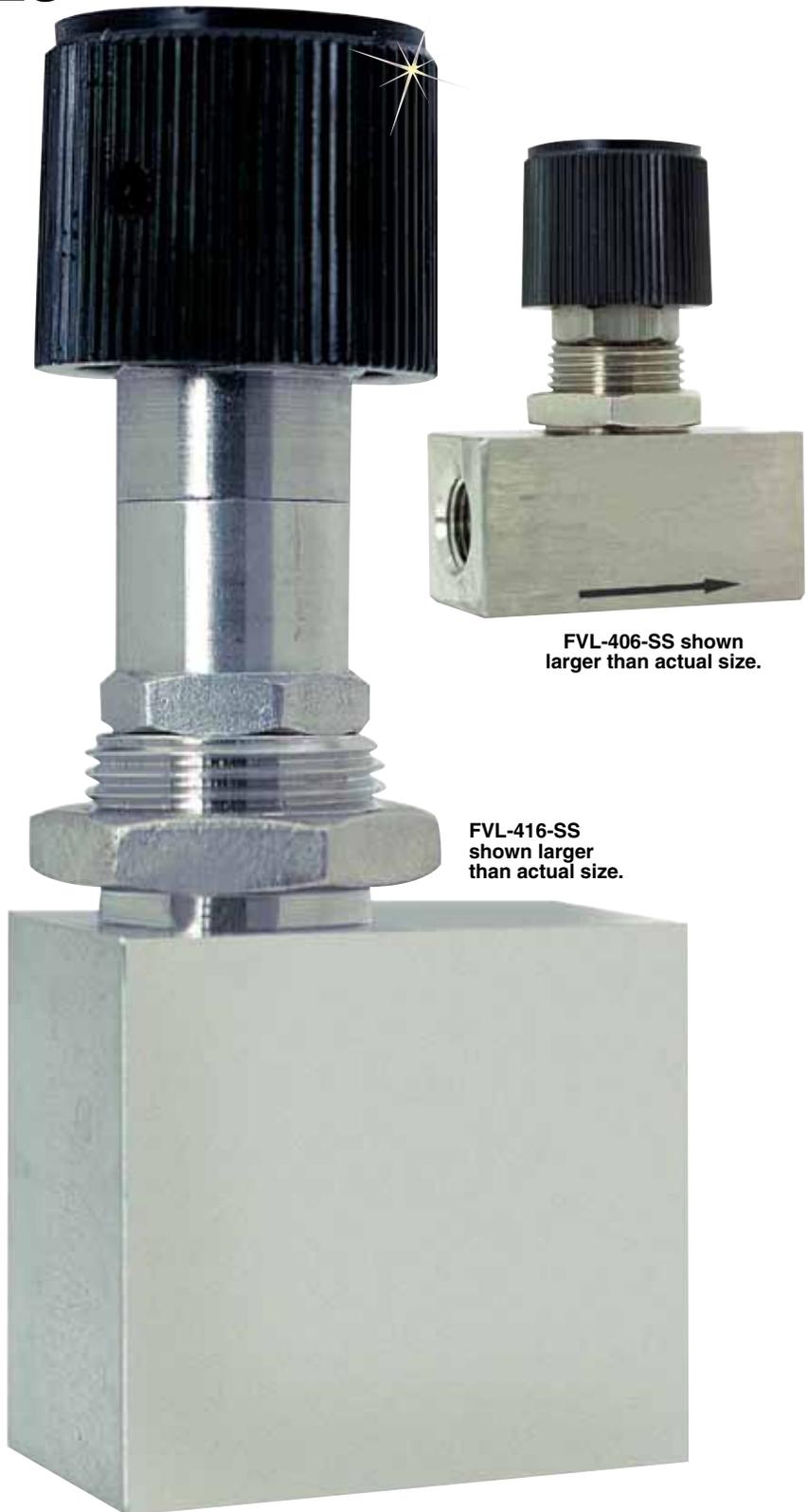


- ✓ All Designs are Panel Mountable
- ✓ Positive Shutoff
- ✓ Straight-Thru (180°) or Right Angle (90°) Flow Paths
- ✓ Standard Valve 10 Turns to Full Open
- ✓ Interchangeable Needle Tapers
- ✓ 316 Stainless Steel or Brass
- ✓ Flow Ranges from 5 CCM to 68 LPM of Air
- ✓ Precision Valve 16 Turns to Full Open

OMEGA® offers the FVL-400 Series control valves for low flow OEM, laboratory instrumentation, or bench top flow control purposes. The valve designs and material make them suitable for use with a variety of gases and fluids.

Complete valves are available in straight through (180°) or 90° angle body configurations and are constructed of brass or stainless steel. All valves are supplied with 1/8 FNPT inlet and outlet ports. The standard control valve is available in 3 different needle tapers which cover our entire flow range. These units have a rising stem and provide 10 turns from closed to full open.

The non-rising stem precision control valve is available in 6 different needle tapers, for fine control of very low flows. This valve offers 16 turns from closed to full open. Its design eliminates saw-toothing and is virtually hysteresis-free. All materials are matched for similar coefficients of expansion.



FVL-406-SS shown larger than actual size.

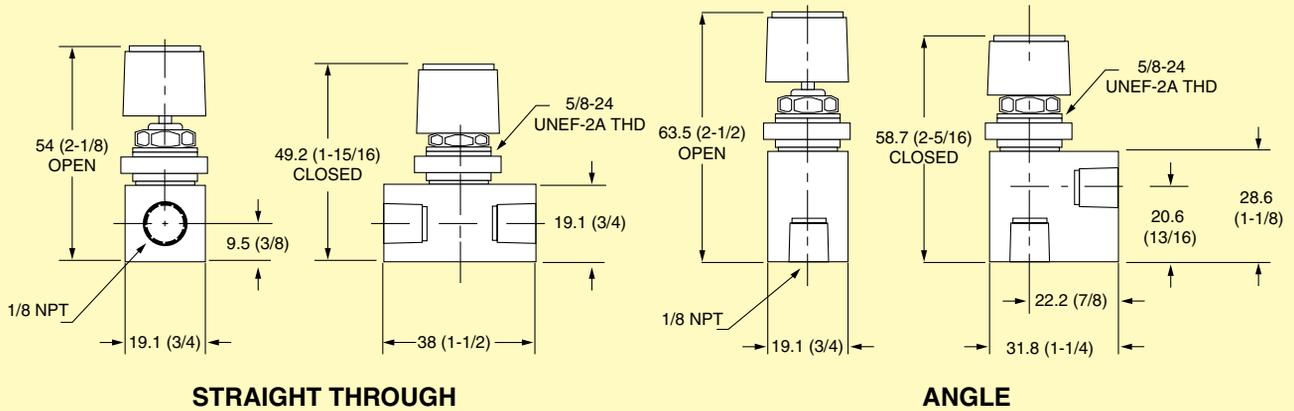
FVL-416-SS shown larger than actual size.

Specifications

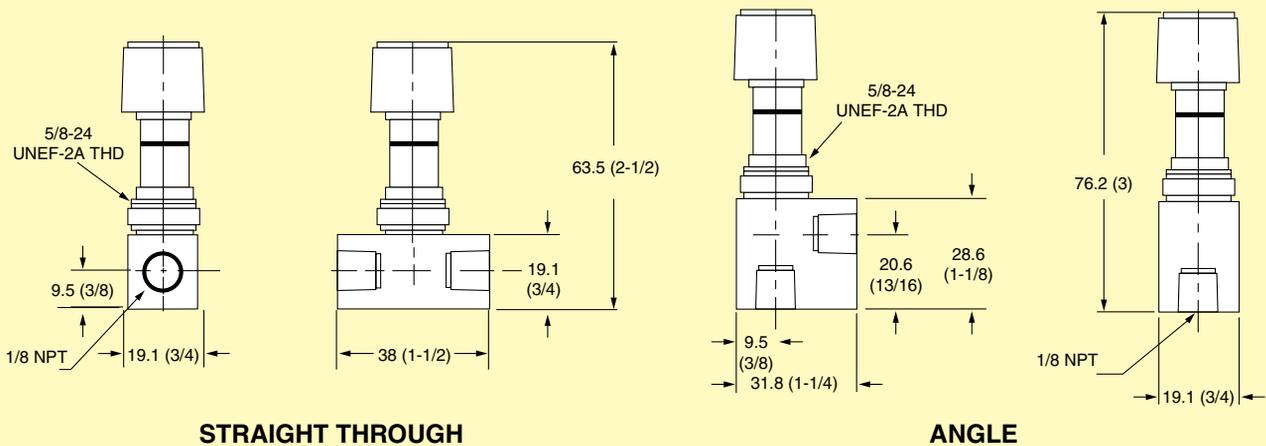
Body Material	Valve Stem	Seals	Orifice	Temperature*	Pressure*
Nickel Plated Brass	316 SS	Nitrile	316 SS	54°C (130°F)	17.2 bar 250 psig
316 SS	316 SS	Fluorocarbon	Kel-F	121°C (250°F)	17.2 bar 250 psig

* Maximum Ratings

Standard Control Valve



Precision Control Valve



Dimensions: mm (inch)

To Order

Standard Valves

Brass Straight Thru Model No.	Brass 90° Angle Model No.	316 SS Straight Thru Model No.	316 SS 90° Angle Model No.	Maximum Flow CCM**			
				Air	C _V	Water	C _V
FVL-401	—	FVL-401-SS	FVL-411-SS	13,000	0.031	385	0.032
FVL-402	—	FVL-402-SS	FVL-412-SS	46,000	0.111	1560	0.130
FVL-403	—	FVL-403-SS	FVL-413-SS	68,000	0.164	3100	0.259

Precision Valves

FVL-404	FVL-414	FVL-404-SS	FVL-414-SS	253	0.001	8	0.001
FVL-405	FVL-415	FVL-405-SS	FVL-415-SS	470	0.001	22	0.002
FVL-406	FVL-416	FVL-406-SS	FVL-416-SS	1100	0.003	40	0.003
FVL-407	FVL-417	FVL-407-SS	FVL-417-SS	3800	0.009	140	0.012
FVL-408	FVL-418	FVL-408-SS	FVL-418-SS	11,900	0.029	430	0.036
FVL-409	FVL-419	FVL-409-SS	FVL-419-SS	21,300	0.052	775	0.065

** Based on 10 psig inlet pressure of air, exhausting to atmosphere.

Ordering Examples: FVL-403, straight through brass valve, 3550 ccm water maximum flow.

FVL-406, straight through precision brass valve, 74 ccm water maximum flow.